

**هيئة التقييس لدول مجلس التعاون دول الخليج العربية**  
**G.C.C STANDARDIZATION ORGANIZATION (GSO)**

**Final Draft**

**GSO 05/FDS ---- / 2011**

**عسل النحل المستخدم في التصنيع الغذائي "عسل الخباز"**  
**Honey for Food Industrial Uses "Baker's Honey"**

**Prepared By**  
**GSO Technical Committee for standards of food and agricultural products**

**This document is a draft GSO Standard circulated for comments. It is, therefore, subject to alteration and modification and may not be referred to as a GSO Standard until approved by GSO Board Of Directors**

**ICS:67.180**

## **Honey for Food Industrial Uses "Baker's Honey"**

**Date of Board of Directors' approval :**  
**Issuing Status :**

### Foreword

GCC Standardization Organization (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No. 5 "Gulf technical committee for standards of food and agriculture products" The Draft Standard has been prepared by Sultanate of Oman. The draft Standard has been prepared based on relevant ADMO, International and National foreign Standards and references.

This standard has been approved as a Gulf (Standard / Technical Regulation) by GSO Board of Directors in its meeting No.(     ),held on     /     /     H ,     /     /     G. The approved standard will replace and supersede the GSO standard No. (     /     ).

## **Honey for Food Industrial Uses "Baker's Honey"**

### **1. SCOPE AND FIELD OF APPLICATION**

This standard is concerned with honey for food industrial uses or cooking named as baker's honey or cooking honey and does not apply to honey prepared for retail to direct human consumption.

### **2. COMPLEMENTARY REFERENCES**

- 2.1 GSO 9 "Labelling of Prepackaged Foods".
- 2.2 GSO 21 "Hygienic Regulations for Food Plants and Their Personnel"
- 2.3 GSO 122 "Methods of Test for Honey".
- 2.4 GSO 147 "Honey"
- 2.5 GSO 1016 "Microbiological Criteria for Foodstuffs – Part 1"
- 2.6 GSO 839 "General Regulations for Food Containers"
- 2.7 GSO 1863 "Food Packages - Part 2: Plastic Packages - General Requirements".
- 2.8 GSO 150 "Expiration periods at food products".
- 2.9 GSO 168 "Requirements of Storage Facilities for Dry and Canned Foodstuffs".

### **3- DEFINITIONS**

#### **3.1 Honey:**

Is the natural sweet substance produced by honey bees from the nectar of plants or secretions of parts or excretions of plant sucking insects on living parts of plants, which the bees collect, transform by combining with specific substances of their own, deposit, dehydrate, store and leave in honey combs to ripen and mature.

#### **3.2 Baker's honey:**

Is honey that is suitable for industrial uses or as an ingredient in other foodstuffs which are then processed.

### **4- REQUIREMENTS**

The honey for food industrial uses (Baker's honey) shall meet the following requirements:

- 4.1 produced and prepared according to GSO standard requirements mentioned in item (2.2)
- 4.2 free from any foreign matter, organic or inorganic, such as insects, insect debris, brood, any part of the life cycle of the insect, grains of sand or any other impurities.
- 4.3 The granulated honey shall have the same characteristics mentioned in item (4.8) of this standard for liquid honey when heated to 55°C for half an hour.
- 4.4 Sucrose and the natural or synthetic food additives are not permitted to be added.
- 4.5 Chemical or biochemical treatments shall not be used to influence honey crystallization.
- 4.6 The percentage of nitrogen does not exceed 0.38% .
- 4.7 The constituents of honey shall be as the following:
  - 4.7.1 **The content** of apparent reducing sugar (as invert sugar) shall not be less than 45%,
  - 4.7.2 **The content of** sucrose shall not exceed 15%
  - 4.7.3 **The content of** moisture shall not exceed 25%
  - 4.7.4 **The content of** water-insoluble solids shall not exceed 0.5%.
  - 4.7.5 **The content of** ash shall not exceed 1%
  - 4.7.6 **The content of** acidity shall not exceed 80 milliequivalents acid per 1000g.
  - 4.7.7 **The content of** hydroxymethylfurfural content shall not exceed 80 mg/kg.
- 4.8 Heavy metals in amounts which may represent a hazard to human health shall comply with the maximum levels for heavy metals set by the Codex Alimentarius Commission.
- 4.9 Residues OF Pesticides and veterinary drugs shall comply with the maximum residue limits for honey set by the Codex Alimentarius Commission.
- 4.10 Microbiological contaminants shall comply with GSO standard for the microbiological criteria mentioned in item (2.5).

## 5- SAMPLING

Samples shall be carried out according to GSO standard mentioned in item 2.4

## 6- METHODS OF TEST

- 6.1 Tests shall be carried out on the representative sample taken according to item 5 to determine its compliance with this standard.

6.2 Tests shall be carried out according to GSO standard mentioned in item 2.3

6.3 Tests may be carried out according to the following methods

Test	Methods
Determination of moisture content	- AOAC 969.38B / J. Assoc. Public Analysts (1992) 28 (4) 183-187 / MAFF Validated method V21.
Determination of water-insoluble solids content	- Assoc. Public Analysts (1992) 28 (4) 189-193/ MAFF Validated method V22
Determination of Sugars added	- AOAC 977.20 for sugar profile, - AOAC 991.41 internal standard for SCIRA (stable carbon isotope ratio analysis.
Determination of Sugars content Fructose and Glucose Content Sucrose content	- GSO 122
Determination of acidity content	- J. Assoc. Public Analysts (1992) 28 (4) 171-175 / MAFF validated method V19
Determination of Diastase Activity	- AOAC 958.09 CODEX STAN 12-1981 Page 6 of 8 Adopted in 1981. Revisions 1987 and 2001
Determination of hydroxyl methyl furfural (HMF) content	- AOAC 980.23

## 7- PACKAGING, TRANSPORTATION AND STORAGE

The following rules shall be observed in packaging, transportation and storage:

### 7.1 Packaging

7.1.1 Without prejudice to provision of GSO Standards mentioned in item (2.6) and item (2.7), the product shall be filled in suitable, clean, dry and airtight containers. The containers shall not cause any undesirable changes to honey during handling and storage.

7.1.2 When the product imported the size of containers shall be not suitable to retail for consumer, and may repacked in suitable containers for direct retail according to item 8.1

### 7.2 Transportation

Containers shall be transported at 25°C and in such a way as to protect them from mechanical damage and contamination.

**7.3 Storage**

The containers shall be stored at 25°C and kept away from sources of high temperature and contamination and according to GSO standard mentioned in items (2.9).

**8- LABELLING**

Without prejudice to the GSO standard requirements mentioned in items (2.1) and (2.8), the following shall be considered:

- 8.1 name of product can be designated “cooking Honey”, “Baker’s honey” or “honey for food industrial uses”
- 8.2 Date of production in a non-coded manner (month and year).

REFERNECESS	المراجع
OFFICIAL JOURNAL OF THE EUROPEAN COMMUNITIES COUNCIL DIRECTIVE 2001/110/EC of 20 December 2001 relating to honey	الجريدة الرسمية للاتحاد الاوربي: توجيهات المجلس رقم ١١٠/٢٠٠١/إي سي في ٢٠/ديسمبر ٢٠٠١ بشأن العسل
GSO 148/2006 “ HONEY “	المواصفة القياسية الخليجية رقم ١٤٨/٢٠٠٦ العسل
Codex stan. 12-2001	مواصفة دستور الغذاء رقم ١٢ - ٢٠٠١